

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
)
Robert ULRICH et al.) Group Art Unit: Unassigned
)
Application No.: Unassigned) Examiner: Unassigned
)
Filed: May 14, 2001)
)
For: A GRAPHICAL USER INTERFACE)
 HAVING SOUND EFFECTS FOR)
 OPERATING CONTROL)
 ELEMENTS AND DRAGGING)
 OBJECTS)

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Entry of this Preliminary Amendment is respectfully requested prior to examination of the above-identified application. Prior to this Preliminary Amendment, claims 1-28 are pending from the parent application Serial No. 09/074/543 filed May 8, 1998.

IN THE SPECIFICATION:

Page 3, line 7, replace "provided" with --provide--.

Page 7, line 15, after "Serial No." insert --09/074,519--.

IN THE CLAIMS:

Please cancel claims 1-27 without prejudice or disclaimer.

Please amend claim 28 to the following (clean form):

28. (Once Amended) A computer-readable medium having at least one data structure from which a sound effect can be produced encoded thereon, said data structure comprising:

a first sound segment for initiating said sound effect;

a second sound segment which is repeatable to sustain said sound effect; and

a third sound segment for decaying said sound effect;

wherein said first sound segment, said second sound segment and said third sound segment are associated with a transition between display states of a graphical user interface.

Kindly add claims 29-56 as follows:

--29. A method for providing a sound effect corresponding to movement of an object drawn on a graphical user interface of a computer system, the method comprising steps of:

drawing said object in said first display position of a display space controlled by said graphical user interface;

receiving a first indication of movement of said object, the movement being on said graphical user interface;

retrieving a sustain sound segment in response to said first indication;

producing said sustain sound segment;

receiving a second indication that the movement of said object on said graphical user interface has terminated; and
terminating said sustain sound segment in response to said second indication.

30. The method of claim 29, wherein the movement of said object is longer in duration than said sustain sound segment's length, the method further comprising a step of:
repeatedly reproducing said sustain sound segment until said second indication is received.

31. The method of claim 29, further comprising a step of:
panning said sustain sound segment between speakers as said object moves.

32. The method of claim 31, wherein said step of panning said sustain sound segment between speakers further comprises a step of:
varying a volume between said speakers as compared to a recorded volume.

33. The method of claim 30, wherein said step of repeatedly reproducing said sustain sound segment further comprises a step of:
reproducing said sustain sound segment at a volume specified for movement of said object.

34. The method of claim 30, wherein said step of repeatedly reproducing said sustain sound segment further comprises a step of:
reproducing said sustain sound segment at a pitch specified for movement of said object.

35. The method of claim 30, wherein said step of repeatedly reproducing said sustain sound segment further comprises a step of:
reproducing said sustain sound segment after a delay specified for movement of said object.

36. The method of claim 30, further comprising a step of:
retrieving, prior to retrieving said sustain sound segment, an attack sound segment that is reproduced prior to repeatedly reproducing said sustain sound segment.

37. The method of claim 29, wherein the step of terminating said sustain sound segment comprises a step of:
transitioning out of said sustain sound segment by producing a decay segment.

38. The method of claim 30, further comprising a step of:
selecting, from within a range of frequencies, a frequency for repeatedly reproducing said sustain sound segment.

39. The method of claim 38, wherein said step of selecting further comprises a step of:

setting said range of frequencies to an envelope of about plus or minus 2.5 percent of an original frequency at which said sustain sound segment was recorded.

40. The method of claim 39, wherein said step of selecting a frequency further comprises a step of:

weighting selection of said frequency from within said envelope.

41. A computer system with a display and a sound effect system, said computer system comprising:

an input device for controlling movement of a cursor on said display, wherein said input device generates a cursor output in response to said cursor being positioned over said control element;

a graphical user interface for rendering said object on said display at a first display position;

a speaker for producing a sound effect associated with movement of said object;

a storage device for storing said sound effect; and

a processor for controlling the speaker to produce said sound effect in response to movement of the object from the first display position.

42. The computer system of claim 41, wherein said speaker is a first speaker,
the computer system further comprising:

a second speaker for outputting said sound effect; and

means for panning said sound effect between said first speaker and said
second speaker in response to movement of the object.

43. The computer system of claim 42, wherein said means for panning further
comprises:

means for varying a volume between said first speaker and said second
speaker as compared to a recorded volume.

44. The computer system of claim 41, wherein a data structure associated with
said sound effect includes a volume parameter specified for output of said sound effect.

45. The computer system of claim 41, wherein a data structure associated with
said sound effect includes a pitch parameter specified for output of said sound effect.

46. The computer system of claim 41, wherein a data structure associated with
said sound effect includes a volume gain parameter specified for output of said sound
effect.

47. The computer system of claim 41, wherein a data structure associated with said sound effect includes an attack segment, a sustain segment and a decay segment.

48. The computer system of claim 47, further comprising:

means for retrieving, prior to retrieving said sustain sound segment, said

attack sound segment; and

wherein said attack sound segment is reproduced prior to repeatedly

reproducing said sustain sound segment.

49. The computer system of claim 48, wherein said means for retrieving further comprises:

means for retrieving and reproducing, after said second display position is reached, said decay sound segment.

50. The computer system of claim 41, further comprising:

means for selecting, from within a range of frequencies, a frequency for repeatedly reproducing said sound effect.

51. The computer system of claim 48, wherein said means for selecting further comprises:

means for setting said range of frequencies to an envelope of about plus or minus 2.5 percent of an original frequency at which said sound effect was recorded.

52. The computer system of claim 51, wherein said means for selecting further comprises:

means for weighting a selection of said frequency from within said envelope.

53. In a graphical user interface, a method for providing sound effects comprising the steps of:

displaying an object in a first display state;

identifying a sound effect using a state table, said sound effect being associated with a transition from a first display state to a second display state;

varying an output characteristic of said sound effect; and

reproducing said sound effect using said varied output characteristic.

54. The method of claim 53, wherein said output characteristic is frequency.

55. The method of claim 54, wherein said frequency is selected from within an envelope of about plus or minus 2.5 percent of an original, recorded frequency.

56. The method of claim 55, wherein said selection is weighted toward said original, recorded frequency.--

REMARKS

Claims 28-56 are presently pending in this Continuation Application which stems from parent Application Serial No. 09/074,543. The parent application was originally filed with claims 1-28. This Preliminary Amendment cancels claims 1-27 of the parent Application, retains claim 28, and adds new claims 29-56.

The Office Action dated December 19, 2000 in the parent Application contained a rejection of claim 28 under 35 U.S.C. § 103(a) in view of U.S. Patent No. 5,867,144 to Wyard et al. ("Wyard") and further in view of U.S. Patent No. 5,969,719 to Tsujimoto et al. ("Tsujimoto") and yet further in view of U.S. Patent No. 5,767,835 to Obbink ("Obbink"). It is respectfully submitted that this rejection is inapplicable in the present application for at least the following reasons. Namely, the hypothetical combination of Wyard-Tsujimoto-Obbink does not disclose or suggest, "wherein said first sound segment, said second sound segment and said third sound segment are associated with a transition between display states of a graphical user interface," the feature of claim 28 added by this Preliminary Amendment.

Entry of the foregoing amendments and favorable consideration of the subject application are respectfully requested. In the event there are any issues which may readily be resolved via telephone, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Scott Charles Richardson
Scott Charles Richardson
Registration No. 43,436

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: May 14, 2001

APPENDIX
MARKED-UP CLAIM AMENDMENTS

28. (Once Amended) A computer-readable medium having at least one data structure from which a sound effect can be produced encoded thereon, said data structure comprising:

- a first sound segment for initiating said sound effect;
- a second sound segment which is repeatable to sustain said sound effect; and
- a third sound segment for decaying said sound effect;

wherein said first sound segment, said second sound segment and said third sound segment are associated with a transition between display states of a graphical user interface.